

## ABSTRACT

In a projection optical system projecting an image displayed on a predetermined display surface onto a predetermined projection surface, two decentering lens units movable in directions vertical to the optical axis and substantially vertical to each other are included between a rear lens unit situated on the display surface side and a front lens unit situated on the projection surface side, a driving mechanism is provided that reciprocates the two decentering lens units in the directions vertical to the optical axis. When the focal lengths of the two decentering lens units are FD1 and FD2, respectively, and the focal length of the rear lens unit is FR, the relationships  $0.01 \leq |FR/FD1| \leq 0.2$  and  $0.01 \leq |FR/FD2| \leq 0.2$  are satisfied.